

3 CLAIMS

What is claimed is:

- 1) A transportation vessel to contain temperature sensitive goods items comprising;
a storage area;
an area for an environmental control unit;
and an area for systems control.
- 2) The transportation vessel of claim 1 is designed to hold temperature sensitive goods.
- 3) The transportation vessel of claim 1 comprises systems control for monitoring at least one goods item.
- 4) Systems controls of claim 3 comprises a transponder to receive a signal from the electronic tag;
a control panel responsive to the transponder;
a rechargeable energy source that is responsive to the control panel;
an environmental control unit that is responsive to the control panel.
- 5) The environmental control unit of claim 4 operates similar to any known HVAC;
the heat load is removed from the storage area through a separate opening in the transportation vessel;
the opening is not responsive to the storage area.
- 6) The transportation vessel of claim 1 further comprising a door opening through which goods is placed into the transportation vessel.
- 7) The transportation vessel of claim 1 further comprising a door protecting the goods from environmental conditions.
- 8) The storage area of claim 1 is thermally sealed with insulation in a multilayer sandwich structure.
- 9) The door of claim 7 is thermally sealed with insulation in a multilayer sandwich structure;
hinges, locks and rubber seals secure that the door in closed position.

- 10) The storage area of claim 1 is responsive to the environmental control unit through a system of air guides and channels;
heated or cooled air enter the storage area through forced air circulation.
- 11) Systems control of claim 4 is attached to the transportation vessel.
- 12) The control panel of claim 4 comprises a display for indicative information related to goods temperature.
- 13) The display of claim 12 also comprises set points of the goods temperature constrains.
- 14) A system for optimizing the energy consumption of the goods comprising: systems control for monitoring at least one goods item, a transponder responsive to systems control, a control panel responsive to the transponder, a rechargeable energy source that is responsive to the control panel and a environmental control unit that is responsive to the control panel.
- 15) The system of claim 14 is electrically connected to each other in a system of electrical circuits and wires.
- 16) A method for sensing goods temperature comprising a temperature sensor electrically connected to an electronic tag to transmit a signal based upon the temperature to the system, the electronic tag is responsive to the temperature sensor.
- 17) At least one temperature sensor of claim 16 is attached to the goods.
- 18) The temperature sensor of claim 16 is designed to sense temperature through conduction.
- 19) The system of claim 14 is designed to activate the method of sensing temperature.
- 20) The system of claim 14 is designed to activate the method of transmitting signals.
- 21) The system of claim 14 is responsive to signals from the electronic tag.
- 22) The system of claim 14 is designed to set up the upper and lower temperature constrains related to the goods.
- 23) The system of claim 14 is designed to operate within the set temperature constrains related to the goods.